

ABSTRACT OF THE DISCLOSURE

The present invention provides a method for detecting and decoding data comprising: receiving a set of data signals from an external data source; detecting a size of said received set of data signals; decoding said received set of data signals; extracting a destination address 5 from said set of data signals; comparing said destination address extracted from said data signals to a known data value; determining whether said received data signals should be received by a host circuitry based upon said comparison of said destination address extracted from said data signals to a known data value; generating at least one status signal alerting said host circuitry of said determination that said received data signals should be received by said 10 host circuitry; and waking up said host circuitry upon a determination that said received set of data is addressed to said host circuitry.

The present invention further provides an apparatus for detecting and decoding data, comprising: a data formatter; a clock divider; a counter; a host circuitry interface capable of 15 transmitting and receiving data from a host circuitry; a memory circuitry; a plurality of comparators; a mask circuitry; a digital logic circuitry; a plurality of status registers; and a plurality of clocked registers.